

accessory device **1000** having a cover **1004** that includes multiple internal power supplies and several folding regions between the internal power supplies, in accordance with some described embodiments. The accessory device **1000** includes a receptacle **1002** designed to receive and carry an electronic device (not shown in FIG. 15). The cover **1004** that is connected to the receptacle **1002** by a hinge **1006**.

[0073] Rather than a single-structure power supply, the cover **1004** includes multiple power supply units, or multiple battery units. For example, the cover **1004** includes a power supply **1022a**, a power supply **1022b**, and a power supply **1022c**. Similar to prior power supplies in accessory devices, the power supply **1022a**, the power supply **1022b**, and the power supply **1022c** are designed to provide energy to an electronic device positioned in the receptacle **1002**. Further, the power supply **1022a**, the power supply **1022b**, and the power supply **1022c** are electrically connected to a connector **1036** of the accessory device **1000** by, for example, circuitry and/or cables (not shown in FIG. 15). The power supply **1022a**, the power supply **1022b**, and the power supply **1022c** may be referred to as a first power supply, a second power supply, and a third power supply, respectively. However, in some embodiments (not shown), the connector **1036** is replaced by contacts (such as contacts **128**, shown in FIG. 1).

[0074] Each power supply can be located in a segment, or partition, of the cover **1004**. For example, the cover **1004** includes a segment **1052a**, a segment **1052b**, and a segment **1052c** that carries the power supply **1022a**, the power supply **1022b**, and the power supply **1022c**, respectively. The power supply **1022a**, the power supply **1022b**, and the power supply **1022c** may be located in a respective compartment (not shown in FIG. 15) located on the segment **1052a**, the segment **1052b**, and the segment **1052c**, respectively. Alternatively, the power supply **1022a**, the power supply **1022b**, and the power supply **1022c** may be embedded between two or more layers of material that form an exterior of the segment **1052a**, the segment **1052b**, and the segment **1052c**, respectively. These layers may include silicone, plastics, leather, synthetic materials, or a combination thereof, as non-limiting examples. Also, the segment **1052a**, the segment **1052b**, and the segment **1052c** may be referred to as a first segment, a second segment, and a third segment, respectively.

[0075] The cover **1004** may include folding regions, or hinges, that separate the segments and allow relative movement between the segments. As shown, the cover **1004** includes a folding region **1054a** that separates the segment **1052a** from the segment **1052b**, and allows relative movement between the segment **1052a** and the segment **1052b**. The cover **1004** further includes a folding region **1054b** that separates the segment **1052b** from the segment **1052c**, and allows relative movement between the segment **1052b** and the segment **1052c**.

[0076] FIG. 16 illustrates a side view of the accessory device **1000** shown in FIG. 15, showing the cover **1004** forming a support for the receptacle **1002** and an electronic device **1070** in the receptacle **1002**, in accordance with some described embodiments. The electronic device **1070** may include any features described herein for an electronic device. As shown, the cover **1004** is folded at the folding region **1054a** and the folding region **1054b** to form a three-dimensional support structure, including a triangular support structure. Moreover, the cover **1004** forms a support

structure that positions the electronic device **1070** in a manner such that a display (not shown in FIG. 16) of the electronic device **1070** is generally upright and readily viewable for a user. The non-labeled lines represent visual information emitted from the display of the electronic device **1070**.

[0077] The segment **1052a** and the segment **1052b** can rotate using the folding region **1054a** and the folding region **1054b**, respectively, and the segment **1052a** can provide a support structure for direct support/engagement with the receptacle **1002**. The segment **1052c** forms a base, or flat support base. The hinge **1006** allows the receptacle **1002** to pivot and rotate relative to the segment **1052c**. By dividing the power supply of the accessory device **1000** into a segmented power supply (defined by the power supply **1022a**, the power supply **1022b**, and the power supply **1022c**), the cover **1004** provides greater flexibility and benefits in the form of a support structure for the electronic device **1070**.

[0078] FIG. 17 illustrates a plan view of an alternate embodiment of an accessory device **1100**, showing the accessory device **1100** with a cover **1104** that includes several components, in accordance with some described embodiments. The accessory device **1100** includes a receptacle **1102** designed to receive and carry an electronic device (not shown in FIG. 17). The accessory device **1100** further includes a cover **1104** that is connected to the receptacle **1102** by a hinge **1106**. The cover **1104** includes a power supply **1122** and a compartment **1124** that holds the power supply **1122**.

[0079] The cover **1104** may include additional components in the compartment **1124**. For example, the cover **1104** may include a charging module **1142** that includes an inductive charging receiver coil designed to receive energy (through electromagnetic or magnetic induction) that is used to charge the power supply **1122**. Alternatively, the charging module **1142** includes an inductive charging transmitter coil that receives energy from the power supply **1122**, and transmits the energy (through electromagnetic or magnetic induction) to charge a battery in an external device (not shown in FIG. 17), such as a user accessory. Still, in some embodiments, the charging module **1142** includes a charging coil that acts as both an inductive charging receiver coil and an inductive charging transmitter coil.

[0080] The cover **1104** may further include a sensor **1156** at least partially located in the compartment **1124**. The sensor **1156** is designed to detect ambient environmental conditions. For example, the sensor **1156** may include an ultraviolet (“UV”) sensor designed to measure ambient UV conditions. Alternatively, the sensor **1156** may include a temperature sensor that detects ambient temperature.

[0081] The cover **1104** may further include wireless circuitry **1158** located in the compartment **1124**. The wireless circuitry **1158** is used to communicate with an electronic device (not shown in FIG. 17) that is carried by the accessory device **1100** in the receptacle **1102**. The wireless circuitry **1158** may communicate information received by the power supply **1122**, the charging module **1142**, and/or the sensor **1156**. As non-limiting examples, the wireless circuitry **1158** may include wireless communication circuitry such as near-field communication (“NFC”), or communication protocol and data exchanges included in standards covered by ISO/IEC 14443 and ISO/IEC. In this regard, the wireless circuitry **1158** may include features such